



PATENT
ATTY. DOCKET NO.: P66237US0

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jim SMIT et al.

Group Art Unit: 3988

Serial No.: 09/919,919

Examiner: Joseph S. Del Sole

Filed: August 2, 2001

For: INSULATION PLUG FOR UNDERWATER PELLETIZER DIE FACE RECESS

RESPONSE

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

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This is in response to the first Office Action of February 4, 2003 (Paper No. 3). Claims 1-20 remain in the application for further examination. Claims 1, 8 and 13 are the independent claims.

As will be discussed, only claims 13 and 16 have been rejected over the prior art. Claims 1-12 were conditionally allowed over the prior art of record; however, the Examiner stated that further detail must be given concerning the testing activities of the invention one year prior to filing of the application. Dependent claims 14, 15 and 17-20 were objected to as being dependent upon a rejected base claim but would otherwise be allowable, assuming that the Examiner is satisfied that there is no public use or sale of the invention prior to the critical date.

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Paragraph 1 of the Detailed Action section of the Office Action references the Applicants' description of pre-critical date activities regarding Figures 1-5 of the application as set forth in the Information Disclosure Statement ("IDS") submitted on January 25, 2002. Applicants respond to the Examiner's inquiries as follows.

First, the Examiner asks if the invention was sold more than one year before the effective filing date of the U.S. application, i.e. before August 2, 2000. The answer is "No". The present invention is an insulation plug (claims 1-7), an extrusion die with a rigid insulating plate (claims 8-12) and an underwater pelletizer (claims 13-20) that includes the insulation plug feature. No pelletizer system or extrusion die that includes the novel insulation plug of the present invention, nor the insulation plug itself, was ever sold prior to the critical date of August 2, 2000.

The Examiner asks, with regard to MPEP 2133.03(e)(1), if there was any attempt at market penetration/commercial exploitation before the critical date. There was no such attempt with respect to the insulation plug or any die or pelletizer that included such insulation plug. In the MPEP section referred to by the Examiner, several factors are listed to demonstrate the subjective intent of

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the inventor as evidence of commercial exploitation. In this case, no commercial documents such as orders, invoices, receipts, delivery schedules of the inventive plug, alone or in combination, were prepared prior to the critical date. No price lists were prepared and no price quotations were distributed. Although the inventive plug of the type shown in Figs. 1-5 was shown to the present assignee prior to the critical date, such was ancillary to the ongoing experimental activities conducted by one of the inventors using the inventive plug on the assignee's underwater pelletizer. No advertising or publicity releases were made nor was the plug shown at trade shows or conventions.

The Examiner asks if any pellets produced during the testing more than one year before the filing date were sold. The answer is that pellets were sold but Applicants deny that this indicates a commercial exploitation and public use of the invention. The only testing that was conducted before the critical date was by the inventor, James A. Smit. This testing was not using the invention under circumstances that would rise to the level of a statutory bar.

In the present case, Mr. Smit was not making commercial use of the invention. He made a single underwater insulation plug, according to the configuration illustrated in Figure 5, which he

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tested on his one and only underwater pelletizing line. The testing was to determine if the insulation plug would work for its intended purpose, which required that it be installed on commercial pelletizing equipment where pellets were actually being produced using the wide range of polymric materials to which underwater pelletization is applicable. No other satisfactory determination could be made as to the efficacy of the insulation plug. Only by utilizing the plug in its expected commercial environment could it be determined if it was workable and reliable to meet the objectives of the plug. For example, prior art insulation materials were subjected to substantial degradation due to the temperatures encountered in the recess of the extrusion die, as is described at pages 2 and 3 of the present application specification.

Testing the insulating plug invention for a substantial period of time under real-life operating conditions, including high temperatures and with a variety of pelletizable materials, was necessary in the present circumstances. Only by doing so could one determine that there was an actual reduction to practice. The fact that the pellets produced during the ongoing experimental operation were disposed of by selling as opposed to throwing the pellets away should have absolutely no impact on a determination of experimental use. That is, it is respectfully submitted that if the testing

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activities are sufficient to rise to the level of a legitimate experimental use, which they undoubtedly were, then that experimental use cannot be negated by the fact that the pellets themselves were disposed of by selling them as opposed to destruction. The sale of the pellets themselves certainly involves no inherent disclosure of the inventive insulation plug.

The Examiner asks if the invention had been reduced to practice, referring to MPEP §2133.03(e)(3). No reduction to practice occurred prior to the August 2, 2000 critical date. Mr. Smit did not regard the invention as complete prior to the critical date. The inventor undertook substantial steps to determine if the insulation plug was effective and these steps were ongoing until after the critical date. Whether modifications or refinements of the invention were made during or as a result of the experimental activity is not dispositive. Successful experimental testing, requiring no changes in design, is experimental use nonetheless. Moreover, modified embodiments as shown in drawing Figures 6-11 were not designed until well after the critical date.

In the referenced MPEP section, there is a discussion regarding the disposal of prototypes, i.e. the prototypes of the invention itself. No such prototypes were disposed of by the

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inventor. Mr. Smit made only one inventive plug and it is still being used by Mr. Smit.

The Examiner also refers to MPEP §2133.03(e)(4) as listing factors indicative of experimental purpose. The Examiner has requested that greater details be provided as to the nature of the testing and reference to the enumerated factors should be provided. The Examiner also suggested a review of MPEP §2133.03(e)(6). Each of these two sections has been considered as follows.

With respect to the relevant factors identified in MPEP §2133.03(e)(4), the testing was not public in any sense although the testing program was shared with the present assignee. Testing took place for a substantial period of time. The testing was conducted by the inventor, Mr. Smit, on his underwater pelletizing line in his own facility. Mr. Smit regularly inspected the plug during the period of experimentation by shutting down and opening up the equipment to inspect the inventive plug. Mr. Smit was the only user during the period of experimental activity and Mr. Smit was the person conducting the testing. There were no conditional sales associated with this experimental activity and the length of time of the experimental activity was reasonable with respect to

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the experimental purpose. The remaining factors set forth in MPEP §2133.03(e)(4) do not appear to be applicable.

With regard to MPEP §2133.03(e)(6), no market testing was undertaken. All of the testing was to determine if the insulation plug or plate would work over an extended period of time, under varying conditions of operation and with different polymer materials, without degradation.

It is respectfully submitted that all of the Examiner inquiries regarding this matter have been fully addressed. The pre-critical date activities do not constitute prior art.

Turning next to the claim rejections, the Examiner has rejected claims 13 and 16 on several grounds. First, the claims were rejected as anticipated by Dudley USP 4,123,207. Second, these claims were rejected as anticipated by Harris et al. USP 5,593,702. Third, the claims 13 and 16 were rejected as anticipated by Applicants' "admission" at page 2, line 13, through page 3, line 4, of the specification and the reference "AS" of the IDS. Reconsideration of each of these rejections is respectfully requested.

The Dudley patent does not anticipate claims 13 and 16. Contrary to the Examiner's contention, Dudley does not disclose a "rigid circular insulation plug" which the Examiner identifies as

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numeral 813 in Fig. 3. This plug is not of a solid one piece construction made of a material having low heat conductivity as the Examiner states is described in column 4, lines 20-27. Dudley numeral 813 is described as disposed over a glass filled Teflon gasket numeral 815A. This plate that overlies a gasket is akin to the prior art described in the present specification at pages 2 and 3 and is not a "rigid circular insulation plug". With respect to claim 16, the rigid circular insulation plug is further defined as a solid one piece construction made of a material having low heat conductivity. Clearly the arrangement in the Dudley patent is a multi-piece construction with a plate overlying a glass filled Teflon gasket.

With respect to the Harris patent, the Examiner contends that a rigid circular insulation plug is shown in Figure 3, numeral 33 attached there by screws. The Examiner states that this "rigid circular insulation plug" is a solid one piece construction made of a material having low heat conductivity. Reconsideration is requested. Numeral 33 is described as a shroud made of "any suitable material". At column 6, lines 43-49, the shroud is described as "wearable" and of a material compatible with the material for making the pellets such as polyethylene, polypropylene, etc. There is no disclosure that this shroud is a

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rigid circular insulation plug nor of a solid one piece construction.

Finally, with respect to the Examiner's contention that claims 13 and 16 are anticipated by Applicant's "admission" at page 2, line 13, through page 3, line 4, and reference "AS", reconsideration is requested. This portion of the specification, and the drawing "AS", discloses a prior art plate disc that overlies insulation material such as two insulation discs of a gasket material. This is not a rigid disk nor a one piece disk as is recited in claims 13 and 16, respectively.

Accordingly, this application is now in condition for allowance. Should the Examiner have any questions after reviewing this Amendment he is cordially invited to telephone the undersigned attorneys.

Respectfully submitted,

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